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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/967,057	09/28/2001	Giovanna Barbarella	3797IN-1-CIP	7383	
22442 7	7590 04/01/2003				
	SHERIDAN ROSS PC			EXAMINER	
1560 BROADWAY SUITE 1200			YAMNITZKY, MARIE ROSE		
DENVER, CO	80202		ART UNIT	PAPER NUMBER	
			1774		
			DATE MAIL ED: 04/01/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

		AS				
	Application No.	Applicant(s)				
	09/967,057	BARBARELLA ÉT AL.				
Office Action Summary	Examin r	Art Unit				
;	Marie R. Yamnitzky	1774				
The MAILING DATE of this communication app ars on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply if NO period for reply is specified above, the maximum statutory period with Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status	6(a). In no event, however, may a reply be tim within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
1) Responsive to communication(s) filed on 28 S	eptember 2001 .					
2a) ☐ This action is FINAL . 2b) ☑ Thi	s action is non-final.					
3) Since this application is in condition for allowa closed in accordance with the practice under <i>B</i>						
Disposition of Claims AVM Claim(a) 0.14 in/org panding in the application						
 4) Claim(s) 9-14 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>9-14</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement					
Application Papers	crodion requirement.					
9) The specification is objected to by the Examiner	•					
10)☐ The drawing(s) filed on is/are: a)☐ accep	ted or b)⊡ objected to by the Exar	miner.				
Applicant may not request that any objection to the		• •				
11) The proposed drawing correction filed on	is: a)☐ approved b)☐ disappro	ved by the Examiner.				
If approved, corrected drawings are required in reply to this Office action.						
12)⊠ The oath or declaration is objected to by the Exa	aminer.					
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a)⊠ All b)□ Some * c)□ None of:						
_						
	2. Certified copies of the priority documents have been received in Application No. <u>09/540,659</u> .					
 3. Copies of the certified copies of the priori application from the International Bur See the attached detailed Office action for a list of 	eau (PCT Rule 17.2(a)).	-				
14) Acknowledgment is made of a claim for domestic						
a) ☐ The translation of the foreign language prov 15)☑ Acknowledgment is made of a claim for domestic	visional application has been rece	eived.				
Attachment(s)	priority under 30 0.3.0. 99 120	anu/UI 121.				
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7.		(PTO-413) Paper No(s) Patent Application (PTO-152)				

Art Unit: 1774

1. The preliminary amendment filed 09/28/01, which amends the specification, cancels

Page 2

claims 1-8 and adds claims 9-14, has been entered.

Claims 9-14 are pending.

2. Applicant has not complied with one or more conditions for receiving the benefit of an

earlier filing date under 35 U.S.C. 120 as follows:

This application is claiming the benefit of a prior filed nonprovisional application under

35 U.S.C. 120, 121, or 365(c). Copendency between the current application and the prior

application is required.

The prior application (09/540,659) became abandoned when the three (3) month

shortened statutory period for reply, set in the Office action mailed May 30, 2001, expired. No

reply to the Office action was received, and no extension of time was requested. Accordingly,

the present application, filed September 28, 2001, was filed after the prior application was

abandoned.

3. Acknowledgment is made of applicants' claim for priority under 35 U.S.C. 119(a)-(d)

based upon an application filed in Italy on April 01, 1999. A claim for priority under 35

U.S.C. 119(a)-(d) cannot be based on said application, since the United States application was

filed more than twelve months thereafter.

Applicant has not met the requirements for obtaining the benefit under 35 U.S.C. 120 of

prior U.S. application 09/540,659, filed March 31, 2000. Therefore, the effective U.S. filing date

Art Unit: 1774

of the present application is September 28, 2001, which is more than twelve months after the

Page 3

filing date of applicants' prior Italian application.

4. The oath or declaration is defective. A new oath or declaration in compliance with 37

CFR 1.67(a) identifying this application by application number and filing date is required. See

MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

The filing dates set forth in the declaration with respect to the prior foreign and U.S.

applications are incorrect.

5. The disclosure is objected to because of the following informalities:

The first line of page 8 contains "7" and "660" but does not show a formula associated

with these values.

The formula shown at line 20 of page 8 is unreadable.

Appropriate correction is required.

6. Claims 9-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for

failing to particularly point out and distinctly claim the subject matter which applicant regards as

the invention.

The scope of a "power supply element" as required by claims 9-13 is not clear.

The scope of the "thienyl-S,S-dioxide compound that has a ring" as required by claims 9, 11 and 12 is not clear. The term "thienyl" implies a monovalent group, which is confusing in light of dependent claims which allow for or require more than one substituent on the thiophene-S,S-dioxide ring structure. The language "that has a ring" is also confusing because thiophene-S,S-dioxide is a ring structure. It is not clear if the phrase "that has a ring" requires that there be at least one ring in the compound in addition to the thiophene-S,S-dioxide ring structure.

The structural limitations imposed upon the device of claims 9-13 by part (ii) of claim 9 are not clear for several reasons. There may be more than one film in the device, of which only one film need be the film that includes a light emitting thienyl-S,S-dioxide compound.

Accordingly, it is not clear if the at least one power supply element must be directly incorporated in the film that includes the light emitting thienyl-S,S-dioxide compound. It is also not clear if the language "directly incorporates" requires the at least one power supply element to be at least partially embedded in the at least one film. It is also not clear what, if any, structure(s) is/are being excluded by the language "without the necessity of contacting or welding", given the open language of the claims. While contacting or welding may not be a necessity, it is not clear if contacting or welding may be included/utilized. The scope of "contacting" and "welding" are also not clear. In particular, with respect to the term "contacting", it is reasonable to expect that a power supply element that is incorporated in a film is in contact with the film.

Proper antecedent basis is lacking for "the ring" as recited in claims 10 and 11. It is not clear if this necessarily refers to the thiophene-S,S-dioxide ring, or if it could refer to some other ring in the compound.



Art Unit: 1774

The limitations imposed by the preamble recitation of "electric contact" in claim 14 are not clear. It is not clear if the light emitting thienyl-S,S-dioxide compound by itself is sufficient to meet the limitations of an electric contact or if the preamble places structural and/or compositional limitations on the claimed subject matter beyond the explicitly recited requirement of a light emitting thienyl-S,S-dioxide compound.

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 8. Claim 14 is rejected under 35 U.S.C. 102(b) as being anticipated by Pouzet et al. in *J. Heterocyclic Chem.*, Vol. 34, pp. 1567-1574 (1997) or Arbizzani et al. in *Optical Materials*, Vol. 9, pp. 43-45 (January 1998) or Barbarella et al. in *J. Org. Chem.*, Vol. 63, pp. 5497-5506 (published on Web 07/17/1998).

In view of applicants' failure to comply with the conditions necessary to obtain priority benefits of prior U.S. and foreign applications, each of these references is available as prior art under 35 U.S.C. 102(b). In the event that applicants later obtain priority benefits of the prior



Art Unit: 1774

U.S. and foreign applications, the Pouzet and Arbizzani references would remain available, based on publication date, under 35 U.S.C. 102(b), and the Barbarella reference would be available under 35 U.S.C. 102(a).

Subject to clarification of the limitations imposed by the preamble recitation of "electric contact", each of the prior art references is considered to anticipate the subject matter of claim 14 since each discloses a thiophene-S,S-dioxide compound.

9. Claims 9, 11, 12 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamada et al. (US 2002/0034658 A1).

In view of applicants' failure to comply with the conditions necessary to obtain priority benefits of prior U.S. and foreign applications, this published application is available as prior art under 35 U.S.C. 102(e).

Yamada et al. disclose thiophene-S,S-dioxide compounds for use as light-emitting and/or electron-transporting compounds in an organic EL device. For example, see [0062]-[0075]. Yamada's compounds meet the limitations of the thiophene-S,S-dioxide compound required by present claims 9, 11, 12 and 14.

Subject to clarification of the present claim limitations as questioned in the rejection under 35 U.S.C. 112, second paragraph as set forth in this Office action, each of the anode and cathode of Yamada's devices is considered to meet the limitations of part (ii) as set forth in claim 9. Each of the anode and cathode is in the form of a film and each is considered to meet the limitations of a power supply element.



Art Unit: 1774

Subject to clarification of the limitations imposed by the preamble recitation of "electric contact", Yamada et al. anticipate the subject matter of claim 14 since thiophene-S,S-dioxide compounds are disclosed.

10. The references made of record and not relied upon are considered pertinent to applicants' disclosure.

EP 1 041 132 A2 is applicants' own work published less than one year prior to the filing date of the present application and therefore not available as prior art.

JP 2001-313174 is of interest as disclosing thiophene-S,S-dioxide compounds for use in an organic LED. This reference is not available as prior art.

11. Any inquiry concerning this communication should be directed to Marie R. Yamnitzky at telephone number (703) 308-4413. The examiner works a flexible schedule but can generally be reached at this number from 6:30 a.m. to 4:00 p.m. Monday, Tuesday, Thursday and Friday, and every other Wednesday from 6:30 a.m. to 3:00 p.m.

The current fax numbers for Art Unit 1774 are (703) 872-9311 for official after final faxes and (703) 872-9310 or (703) 305-5408 for all other official faxes. (Unofficial faxes to be sent directly to examiner Yamnitzky can be sent to (703) 872-9041.)

MRY 03/28/03

> MARIE YAMNITZKY PRIMARY EXAMINER

Marie R. Jamnitghy